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U.S. Patent Application Serial No. 10/572,852
Response to OA dated August 27, 2007**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method of forming a product of a metal-based composite material, ~~characterized by~~ comprising the steps in the order named of:

the step of preparing a billet of a metal-based composite material by mixing a metal matrix and particles of [[a]] ceramic reinforcing material;

the step of heating the billet to a specific temperature, the specific temperature being equal to or above the solidus temperature of the metal matrix; and

the step of pressure forming the heated billet in a die assembly, so that the billet may have while being pressure formed has a compression ratio H/h 1 differing from one portion of the formed product to another to [[give]] cause the metal matrix to flow through among the particles of the ceramic reinforcing material in a lateral outward direction while allowing nearly all of the particles of the ceramic reinforcing material to stay in a central portion of the billet being pressure formed with the remainder being forced by the metal matrix to flow in the lateral outward direction as the metal matrix flows in the lateral outward direction, thereby giving the formed product a ceramic volume content differing from one portion to another, where H is the height of the billet prior to forming and h 1 is the thickness of the formed product, the formed product containing the particles of the ceramic reinforcing material distributed over the entire region thereof its height after forming.

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Claim 2 (Original): The method of claim 1, wherein the billet has a height varying from one portion to another.

Claim 3 (Original): The method of claim 1, wherein the pressure forming employs a split die assembly.

Claim 4 (Original): The method of claim 1, wherein the pressure forming employs a die assembly having heat insulation in its portions contacting the billet.

Claim 5 (Previously Presented): The method of claim 1, wherein an aluminum alloy is employed as the matrix, and an alumina aggregate as the ceramic.

Claim 6 (Original): The method of claim 1, wherein the step of heating is carried out for heating the billet to or above 580°C.

Claim 7 (Previously Presented): The method of claim 2, wherein an aluminum alloy is employed as the matrix, and an alumina aggregate as the ceramic.

Claim 8 (Previously Presented): The method of claim 3, wherein an aluminum alloy is employed as the matrix, and an alumina aggregate as the ceramic.

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Claim 9 (Previously Presented): The method of claim 4, wherein an aluminum alloy is employed as the matrix, and an alumina aggregate as the ceramic.